



# Retroreflective sensor ML17-54/59/103/115a/154

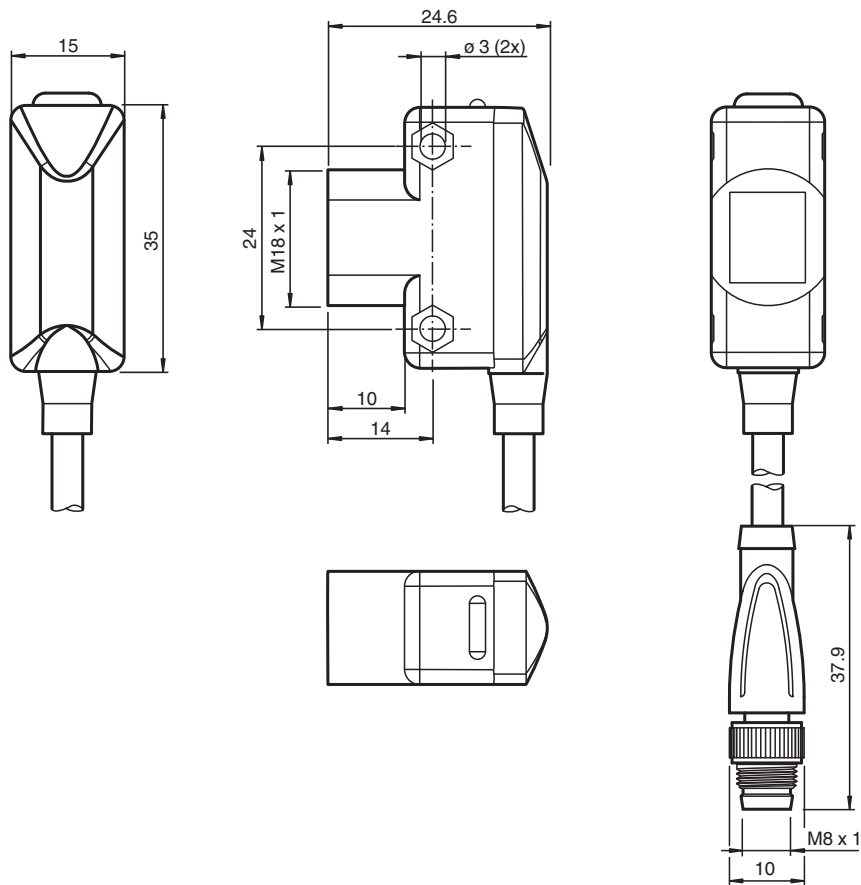


- Compact, versatile housing
- 360° high visibility LEDs
- Basic version with single output stage
- Tamper-proof version with no adjustments
- Pigtail quick disconnect
- M8-plug connection

Retroreflective sensor with polarization filter



## Dimensions



## Technical Data

### General specifications

Effective detection range	0 ... 3.5 m
Reflector distance	50 ... 3500 mm
Threshold detection range	5 m
Reference target	FE-RR1 reflector

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Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

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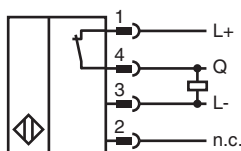
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## Technical Data

Light source	LED	
Light type	modulated visible red light , 626 nm	
Polarization filter	yes	
Ambient light limit	≤ 10000 Lux	
<b>Indicators/operating means</b>		
Operation indicator	LED green	
Function indicator	LED yellow, lights up with receiver lit	
<b>Electrical specifications</b>		
Operating voltage	$U_B$	10 ... 30 V DC , class 2
Ripple	max. 10 %	
No-load supply current	$I_0$	< 25 mA
Operating current	$I_B$	100 mA max per output
Time delay before availability	$t_v$	≤ 200 ms
<b>Output</b>		
Switching type	dark-on	
Signal output	1 PNP, short-circuit protected, reverse polarity protected	
Switching voltage	max. 30 V DC	
Switching current	max. 100 mA	
Voltage drop	$U_d$	≤ 2.5 V DC
Switching frequency	$f$	500 Hz
Response time	≤ 1 ms	
<b>Conformity</b>		
Product standard	EN 60947-5-2	
<b>Approvals and certificates</b>		
UL approval	cULus	
CCC approval	CCC approval / marking not required for products rated ≤36 V	
<b>Ambient conditions</b>		
Ambient temperature	-20 ... 55 °C (-4 ... 131 °F)	
Storage temperature	-20 ... 70 °C (-4 ... 158 °F)	
<b>Mechanical specifications</b>		
Housing width	15 mm	
Housing height	34.5 mm	
Degree of protection	IP67	
Connection	150 mm PVC cable with 4-pin, M8 connector	
<b>Material</b>		
Housing	ABS	
Optical face	Acrylic	
Mass	approx. 40 g	

## Connection



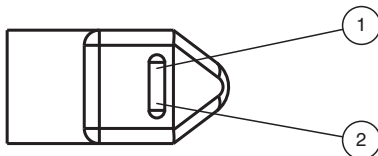
## Connection Assignment



Wire colors in accordance with EN 60947-5-2

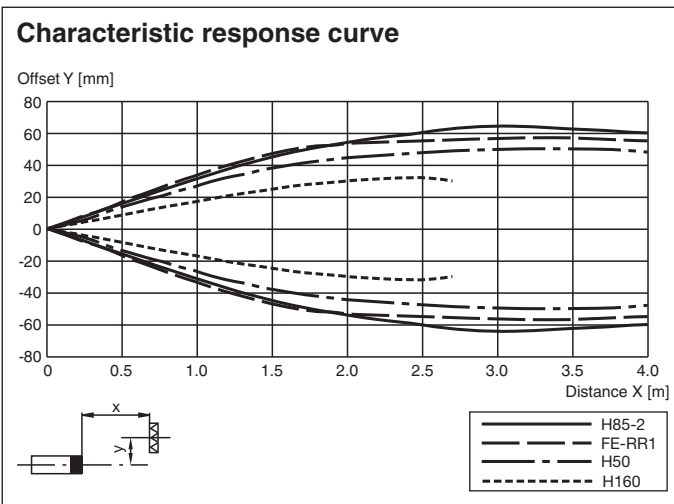
1	BN	(brown)
2	WH	(white)
3	BU	(blue)
4	BK	(black)

## Indication



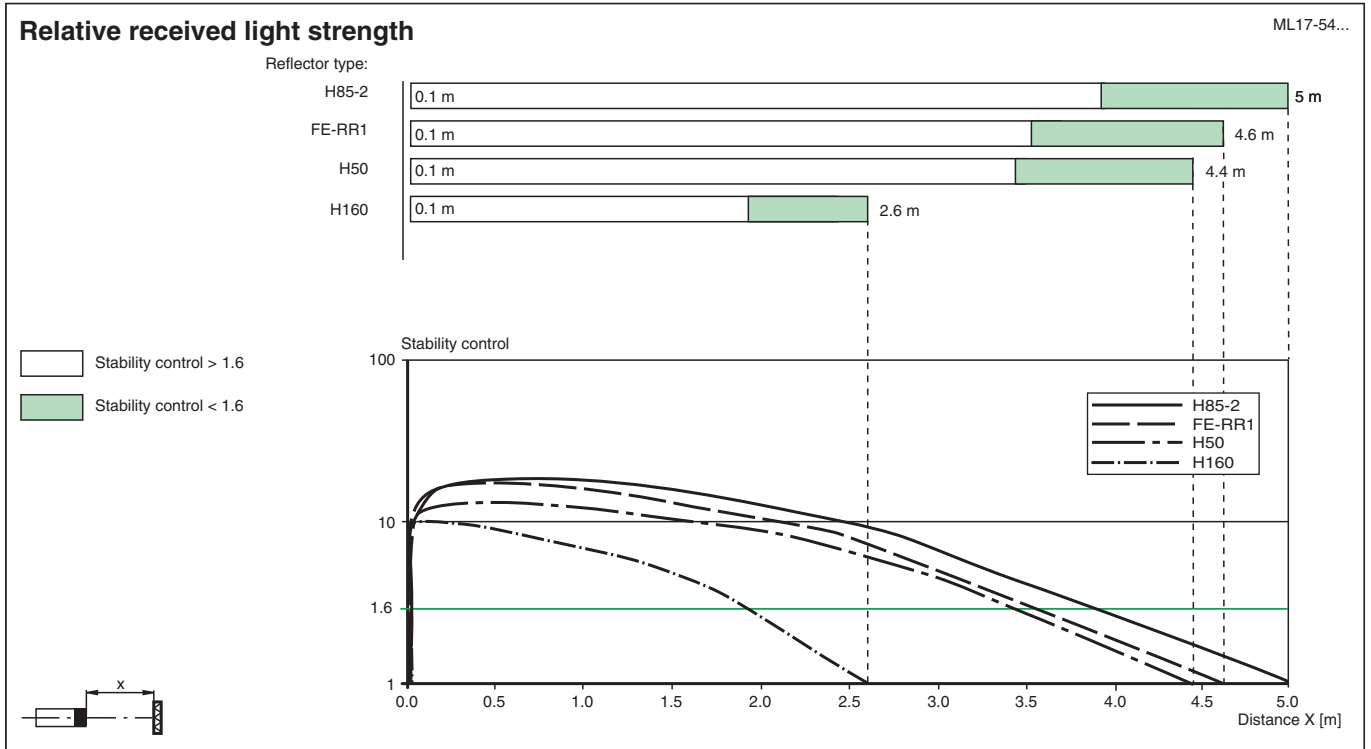
1	Signal display	yellow
2	Operating display	green

## Characteristic Curve



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Characteristic Curve



Accessories

	<b>OMH-ML17</b>	Mounting bracket
	<b>OMH-ML17-1</b>	Mounting bracket
	<b>V31-GM-BK2M-PUR-U</b>	Female cordset single-ended M8 straight A-coded, 4-pin, PUR cable black, UL approved, drag chain suitable, torsion resistant
	<b>V31-WM-BK2M-PUR-U</b>	Female cordset single-ended M8 angled A-coded, 4-pin, PUR cable black, UL approved, drag chain suitable, torsion resistant
	<b>V31-GM-BK5M-PUR-U</b>	Female cordset single-ended M8 straight A-coded, 4-pin, PUR cable black, UL approved, drag chain suitable, torsion resistant
	<b>V31-WM-BK5M-PUR-U</b>	Female cordset single-ended M8 angled A-coded, 4-pin, PUR cable black, UL approved, drag chain suitable, torsion resistant

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